UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P. D. Rey 1459

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23373 7590 0223/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON DC 20037 EXAMINER

LOCKARD, JON MCCLELLAND

ART UNIT PAPER NUMBER

1647

DATE MAILED: 02/23/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,566	07/15/2004	Yumiko Uno	Q101072	8263

TITLE OF INVENTION: HUMAN SODIUM-DEPENDENT BILE ACID TRANSPORTER PROTEINS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/24/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence including ed below or directed other tions.	ng the Patent, advance herwise in Block 1, by	orders and notification ((a) specifying a new co	of m	aintenance fees v oondence address	vill be and/or	mailed to the current (b) indicating a sepa	correspondence address a rate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
23373	7590 02/23	3/2010		lave			_	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800				Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the States Postal Service with sufficient postage for first class mail in an e addressed to the Mail Stop ISSUE FEE address above, or being fi transmitted to the USPIO (571) 272-2885, on the date indicated below				deposited with the United t class mail in an envelope above, or being facsimile tte indicated below.
WASHINGTON	N, DC 20037							(Depositor's name)
								(Signature)
			[(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/501,566	07/15/2004		Yumiko Uno				Q101072	8263
TITLE OF INVENTION	: HUMAN SODIUM-D	EPENDENT BILE ACI	D TRANSPORTER PRO	OTE	INS			
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UΕ	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300		\$0		\$1810	05/24/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	П				
LOCKARD, JON	MCCLELLAND	1647	530-350000	_				
1. Change of corresponde CFR 1.363).	ence address or indicatio	n of "Fee Address" (37	2. For printing on the				T	
	ondence address (or Cha B/122) attached.		(I) the names of up or agents OR, altern	p to nativ	3 registered pater ely,	t attori	ieys 1	
PTO/SB/47; Rev 03-0 Number is required.	ication (or "Fee Address)2 or more recent) attach	ned. Use of a Customer	2 registered patent : listed, no name will	attor	nevs or agents. If	no nan	ie is 3	
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or	tvp	e)			
PLEASE NOTE: Unl	less an assignee is ident	ified below, no assigned	e data will appear on th	e pa	tent. If an assign	ee is ic	lentified below, the do	cument has been filed for
(A) NAME OF ASSI		pietion of this form is No	(B) RESIDENCE: (C.					
(-)			(-,,				,	
				_	_			_
Please check the appropr	iate assignee category or	categories (will not be p	printed on the patent):	u	Individual 🖵 Co	orporati	on or other private gro	up entity 🚨 Government
4a. The following fee(s)	are submitted:	4	4b. Payment of Fee(s): (I	Pleas	se first reapply a	ny prev	iously paid issue fee s	hown above)
Issue Fee		to the	A check is enclose		. F. Dave 2020			
Advance Order	vo small entity discount p # of Copies	permitted)	Payment by credit The Director is her	ebv	authorized to char	ge the	required fee(s), any def	iciency, or credit any
			overpayment, to D	epós	it Account Numb	ř	(enclose ar	extra copy of this form).
5. Change in Entity Sta	tus (from status indicate is SMALL ENTITY stati		☐ b. Apolicant is no.	lone	er claiming SMA	LL.EN	FITY status. Sec 37 CF	R 1 27(e)(2)
- 11								e assignee or other party ir
interest as shown by the	records of the United Sta	ites Patent and Trademan	rk Office.					
Authorized Signature					Date			
Typed or printed name					Registration N	lo		
		CFR 1.311. The informat	ion is required to obtain	or re	-		lic which is to file (and	by the USPTO to process
an application. Confiden submitting the completes this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu 'irginia 22313-1450. DO 113-1450.	U.S.C. 122 and 37 CFF USPTO. Time will var rden, should be sent to D NOT SEND FEES OR	R 1.14. This collection is y depending upon the ir he Chief Information Of COMPLETED FORMS	esti divi fice TO	mated to take 12 dual case. Any co r, U.S. Patent and THIS ADDRESS	minutes omment Trader S. SEN	to complete, including s on the amount of tin hark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process, g gathering, preparing, and ne you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/501,566	07/15/2004	Yumiko Uno	Q101072 8263		
23373	7590 02/23/2010		EXAMINER		
SUGHRUE MION, PLLC			LOCKARD, JON	MCCLELLAND	
2100 PENNSYLVANIA AVENUE, N.W.			ART UNIT	PAPER NUMBER	
SUITE 800 WASHINGTON, DC 20037			1647 DATE MAII ED: 02/23/201	0	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 627 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 627 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/501,566	UNO ET AL.	
Examiner	Art Unit	
JON M. LOCKARD	1647	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to the Request for Continued Examination filed 01 February 2010.
- 2. The allowed claim(s) is/are 20 and 116-118 (renumbered as claims 1-4, respectively).
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a)

 All b)

 Some* c)

 None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date <u>2/1/2010</u>
- Examiner's Comment Regarding Requirement for Deposit of Biological Material

/J. M. L./ Examiner, Art Unit 1647 5. Notice of Informal Patent Application

 Interview Summary (PTO-413), Paper No./Mail Date .

7.

Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

9. Other ____.
/Christine J Saoud/

Primary Examiner, Art Unit 1647

Art Unit: 1647

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under Ex Parte Quayle, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 01 February 2010 has been entered.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 01 February 2010 has been considered by the examiner.

Reasons for Allowance

- The following is an examiner's statement of reasons for allowance.
- 4. The information disclosure statement filed 01 February 2010 has been considered by the Examiner. After careful consideration, the Examiner has determined that none of the information contained therein raises new issues of patentability.
- 5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/501,566
Art Unit: 1647

Advisory Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jon M. Lockard, Ph.D.** whose telephone number is (571) 272-2717. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol, Ph.D., can be reached on (571) 272-0835. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see https://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. M. L./ Jon M. Lockard, Ph.D. Examiner, Art Unit 1647 February 11, 2010 /Christine J Saoud/ Primary Examiner, Art Unit 1647